

REMARKS

These remarks and the accompanying amendments are responsive to the Office Action made final and dated September 15, 2008 (hereinafter referred to as the "Office Action"). At the time of the last examination, Claims 1, 2, 4-6, 8, 18-20, 22, 23, 33-37, 47, 49 and 53-85 were pending, of which Claims 1, 4-6, 8, 18, 19, 23, 33, 35-37, 47, 49, 53, 54, 62, 69, 70, 78 and 85 are independent. The Office Action rejected independent Claims 62, 78, allowed Claims 1, 2, 4-6, 8, 18-20, 22, 23, 33-37, 47, 49, 53-61, 64-77 and 80-85 and objected to dependent Claims 63 and 79.

Section 4 of the Office Action rejects Claim(s) 62 and 78 under 35 U.S.C. 103(a) as being unpatentable over non-patent literature by Andoh (IEEE, "Channel Estimation Using Time Multiplexed Pilot Symbols for Coherent Rake Combining for DS-CDMA Mobile Radio") in view of United States patent number 6,487,236 issued to Iwamatsu et al. (the patent hereinafter referred to simply as "Iwamatsu"). Claims 63 and 79 are objected as being dependent upon a rejected based claim.

Claims 62 and 78 are amended herein. The amendments are supported by the description of the fourth embodiment and the corresponding Figures 30A and 30B. No new matter is introduced. In Figure 30A, for example, the channel estimation units 2-1, 2-2, ..., 2-N are examples of a channel estimation means in Claim 62. In Figure 30B, for example, the reliability unit 9 is an example of the reliability judging means in Claim 62.

There are several features of Claim 62 that are not described, taught or suggested by Andoh or Iwamatsu, either singly or in combination. In the manner recited in Claims 62 and 78, a plurality of channel estimation values are derived by weighted averaging of a single pilot signal using a plurality of predetermined weighting sequences. Ando discloses a channel estimation

scheme in which only one channel estimation value $\xi(n)$ is derived from a pilot signal (a sequence of pilot symbols in a plurality of slots) for one finger. Iwamatsu does not disclose channel estimation or weighted averaging.

According to Claims 62 and 78, a plurality of demodulated data sequences are derived from the data sequence by performing phase correction in which said plurality of channel estimation values are applied to the data sequence, and one of the demodulated data sequences is selected based on the reliabilities of said plurality of demodulated data sequences. Ando does not disclose generation of demodulated data sequences resulting from phase correction, and therefore do not disclose selection of one of the demodulated data sequences. Although Ando disclose a plurality of channel estimation values $\xi_i(n)$ which are supplied to the RAKE combiner, the RAKE combiner does not perform phase correction and does not generate a plurality of demodulated data sequences. Iwamatsu does not disclose that a plurality of demodulated data sequences are derived from the data sequence by performing phase correction in which said plurality of channel estimation values are applied to the data sequence. Claim

Accordingly, Claims 62 and 78 are very different from the art of record. In addition, the disclosure that supports Claims 62 and 78 makes it possible to output the most suitable demodulated data sequence derived from the weighting sequence which is the most suitable for the actual mobile communication environment among all weighting sequences. This advantage is not obtained by Andoh Iwamatsu.

Accordingly, Claims 62 and 78 are not anticipated nor rendered unpatentable over Andoh and Iwamatsu. Thus, the 35 U.S.C. 103(a) rejection should be withdrawn.

In the event that the Examiner finds remaining impediment to a prompt allowance of this application that may be clarified through a telephone interview, the Examiner is requested to contact the undersigned attorney.

Dated this 15th day of December, 2008.

Respectfully submitted,

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